

Amendments to the claims:

1. (currently amended) A current collector for use in batteries, comprising:
a reticulated carbon substrate having ~~surfaces defining~~ circuitous pores; and
a layer of a lead-tin containing alloy applied to the ~~surfaces~~ reticulated carbon substrate.
2. (cancelled)
3. (cancelled)
4. (cancelled)
5. (currently amended) The current collector according to claim 4 1, wherein the reticulated carbon substrate includes a reticulated vitreous carbon.
6. (previously amended) The current collector according to claim 5, wherein the vitreous carbon includes about 20 to 30 pores per inch.
7. (cancelled)
8. (cancelled)
9. (cancelled)
10. (currently amended) The current collector according to claim 1, further comprising a frame ~~mountable in a battery~~ attached to an outer edge of the reticulated carbon substrate.
11. (previously amended) The current collector according to claim 1, wherein the tin content of the alloy includes about 0.2% to 3% by weight of the alloy.

12. (previously amended) The current collector according to claim 1, wherein the tin content of the alloy includes about 0.5% to 2% by weight of the alloy.

13. (currently amended) The current collector according to claim 1, wherein the surface area of the ~~surfaces~~ reticulated carbon substrate includes about 500 to 20,000 square meters per cubic meter of the ~~reticulated substrate~~.

14. (currently amended) The current collector according to claim 1, wherein the thickness of the layer of the lead-tin containing alloy includes about 20 to 2,000 microns.

15. (cancelled)

16. (cancelled)

17. (currently amended) An electrode for use in lead-acid batteries, comprising:
a reticulated carbon substrate having ~~surfaces defining~~ circuitous pores;
a layer of lead-tin alloy deposited on the ~~surfaces~~ substrate; and
a layer of a lead-containing paste on the layer of the lead-tin alloy.

18. (cancelled)

19. (cancelled)

20. (currently amended) A battery, comprising:
a housing;
a pair of electrodes fixed within the housing, each of the electrodes having a reticulated carbon substrate ~~having surfaces defining~~ with circuitous pores, a layer of a metal alloy applied to the ~~surfaces~~ substrate, and an active material ~~coating~~ applied to at least a portion of the metal alloy;
an electrolyte contacting the electrodes and bridging the space between them; and

terminal connections connected to the electrodes.

21. (withdrawn)

22. (withdrawn)

23. (withdrawn)

24. (withdrawn)

25. (withdrawn)

26. (withdrawn)

27. (currently amended) The current collector according to claim 1, wherein the reticulated carbon substrate comprises a conductive material.

28. (currently amended) The ~~current collector~~ electrode according to claim 17, wherein the paste includes lead oxide.

29. (currently amended) The ~~current collector~~ electrode according to claim 17, wherein the paste includes lead sulfate and lead oxide.

30. (currently amended) The ~~current collector~~ electrode of claim 17, wherein the paste includes lead sulfate.

31. (currently amended) The electrode according to claim 17, wherein the reticulated carbon substrate includes vitreous carbon.